

Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Hominy Branch

Water Body Segment at a Glance:

County: Boone
Nearby City: Columbia
Water Body ID: 1011
Segment Length: 1 mile

Watershed Size: 6.6 square miles

Pollutant: Bacteria

Source: Runoff – various¹



Scheduled for TMDL development: 2016

Description of the Problem

Designated beneficial uses of Hominy Branch

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation Category B
- Secondary Contact Recreation

Uses that are impaired

Whole Body Contact Recreation – Category B

Standards that apply

• Missouri's Water Quality Standards at 10 CSR 20-7.031(4)(C) states that for waters designated for whole body contact recreation category B, the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 206 colonies per 100 milliliters of water during the recreational season. The recreational season is defined as being from April 1to October 31.

Background information and water quality data

Hominy Branch flows through the city of Columbia and is a tributary of Hinkson Creek. The stream is designated as category B for the whole body contact recreation use. Hominy Branch was first

¹ Sources cited are runoff from forest, grassland, parkland, rural areas, residential areas, urban areas, and storm sewers. Created: 2/2013

listed as impaired by bacteria on the state's 2012 303(d) List of impaired waters, which was approved in whole by the U.S. Environmental Protection Agency on Nov. 13, 2012.

The department judges a stream to be impaired by bacteria if the water quality criterion for *E. coli* is exceeded in any of the last three years for which there is adequate data (minimum of five samples taken during the recreational season). High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. *E. coli* are bacteria found in the intestines of warm-blooded animals and are used as indicators of the risk of waterborne disease from pathogenic (disease causing) bacteria or viruses. Missouri's whole body contact bacteria criteria are based on specific levels of risk of acute gastrointestinal illness. The level of risk correlating to the category B criterion is no more than 10 illnesses per 1,000 swimmers in fresh water (1 percent).

Recreational season *E. coli* bacteria data for Hominy Branch was collected in 2004. The geometric mean of these data exceed the whole body contact category B criterion. For this reasons, Hominy Branch has been assessed as impaired by *E. coli* and was included on the 2012 303(d) List of impaired waters.

Bacteria Data for Hominy Branch

| Ductoria Data for Homming Dranon | | | | | | | |
|----------------------------------|-----------------------|------|-------|-----|------|---------|-------------------------|
| Sample Site | Water Body | Year | Month | Day | Flow | E. coli | Rec. Season E. coli. |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 7 | 7 | | 460 | 460 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 7 | 27 | | 401 | 401 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 8 | 18 | | 78 | 78 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 8 | 20 | | 4800 | 4800 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 9 | 9 | 0.02 | 94 | 94 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 9 | 16 | 3.71 | 4840 | 4840 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 9 | 29 | | 550 | 550 |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 11 | 9 | | 46 | |
| 1011/0.1 | Hominy Cr. near mouth | 2004 | 12 | 15 | | 52 | |
| | Geometric Mean 2004 | | | | | | 560 |

Created: 2/2013

Columbia Columbia Legend Impaired Segment Streams Sample Site Municipal Area Watershed Boundary Vatershed Boundary

Map Showing the Hominy Branch Watershed

NOTE:

The final Hominy Branch TMDL will use the most recent and available data and information.

For more information call or write:

Missouri Department of Natural Resources Water Protection Program P.O. Box 176, Jefferson City, MO 65102-0176 1-800-361-4827 or 573-751-1300 office 573-526-6802 fax

Program Home Page: dnr.mo.gov/env/wpp/index.html

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